

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
--	--	---	--

Work Order ID 110350

December-17-13 9:23:58 AM

110350

Page 2

Item ID: D900-619-011

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Bearpaw

Start Date: 12/17/13 Start Qty: 1.00

1

Cust Item ID:

Required Date: 12/17/13 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

NR1

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D900-619-011								
	Location: <u>EG-011</u>								
	PPP rev: _____								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

(20) 14-01-21

14-01-23

14-01-21

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
--	--	---	--

Picklist Print

Page 1

January-17-14 11:42:04 AM

Work Order ID: 110350

Parent Item: D900-619-011

Parent Item Name: Bearpaw

Start Date: 12/17/13

Required Date: 12/17/13

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP .C04.02.17Blank size changed on Step 3KJ/JLM
IPP Rev:D Was k10010 07-01-03 JLM
IPP Rev:E New Manufacturing Method 08-11-04 Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN4-15A Bolt		Purchased	No			110	Each	550.0000	16				DAS 26 9-89
				<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>						
				GA		100							
				120449		100							
				st357		450							
				m127817		450							
D2182B Seal(\$Per Foot)		Manufactured	No			110	f	250.0200	4				DAS 26 9-89
				<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>						
				ST412		250.02							
				101827		1							
				108914		249.02							
D2274 Radius Block		Manufactured	No			110	Each	727.0000	16				DAS 26 9-89
				<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>						
				FG		12							
				86855		12							
				ST007		8							
				65047		8							
				ST008		707							
				108466		10							
				109534		397							
				110264		300							
D2421 Bearpaw Polymer		Manufactured	No			110	Each	1.0000	4				DAS 26 9-89
				<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>						
				ST269		1							
				108911		1							

Picklist Print

January-17-14 11:42:04 AM

Page 2

Work Order ID: 110350
Parent Item: D900-619-011
Parent Item Name: Bearpaw

Start Date: 12/17/13 Required Date: 12/17/13
Start Qty: 2.00 Required Qty: 2.00

D2519 Manufactured No 110 Each 53.0000 4 8 DAS 26 9-89
Clamp

2x

DAS
31
9-89

Location	Loc Qty	Loc Code
ST456	53	
101510	23	
62078	4	
99606	26	

D2529
Washer

2x

DAS
31
9-89

Manufactured No 110 Each 259.0000 8 16 DAS 26 9-89

Location	Loc Qty	Loc Code
ST011	259	
108881	200	
109580	59	

MS2104214
Locknut

2x

DAS
DAS
31
9-89

Purchased No 110 Each 4,731.0000 8 16 DAS 26 9-89

Location	Loc Qty	Loc Code
GA	68	
m126333	68	
ST509	4000	
m127255	2000	
m127813	2000	
ST518	663	
m127376	663	

NAS1149D0463J
WASHER

2x

DAS
31
9-89

Purchased No 110 Each 7,432.0000 8 16 14-1-20 DAS 26 9-89

Location	Loc Qty	Loc Code
ST294	3032	
M127693	3032	
ST510a	4400	
M127813	1400	
M127904	3000	

Picklist Print

January-17-14 11:42:04 AM

Page 3

Work Order ID: 110350
Parent Item: D900-619-011
Parent Item Name: Bearpaw

Start Date: 12/17/13 Required Date: 12/17/13
Start Qty: 2.00 Required Qty: 2.00

QS100-M24S
Clamp

Purchased No

110 Each 10.0000

4

8

11-1-20

DAS
26
9-89

Location

Loc Qty

Loc Code

ST452

10

M127389

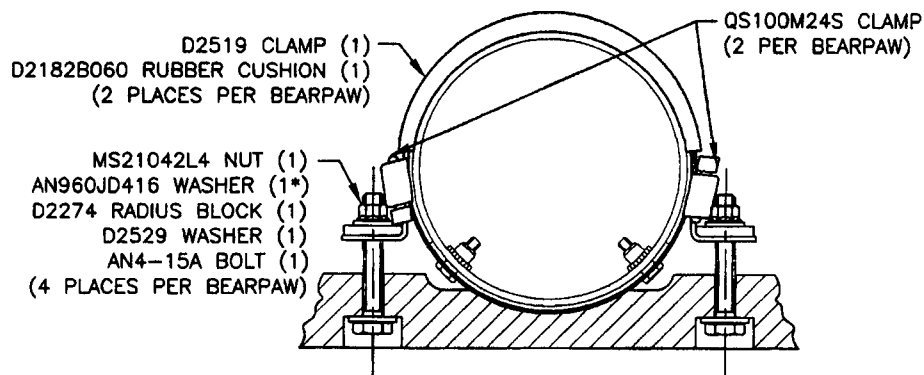
10

8x

DAS
6
9-89

2
DAS
31
9-89

DAS 14-01-20
31
9-89



* See note 6

Figure 3: Bearpaw Installation (section view)

6. Additional AN960JD416 washers may be installed under the nuts to ensure 1.5-4 threads in safety on the bolts. Although not generally necessary, it is also acceptable to replace the AN4-15A bolts with longer or shorter AN4 bolts, if required.
7. Lower the aircraft

4. WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D900-619-011 Bearpaw Installation	13.8 lb 6.3 kg	0.0 in 0.0 m	0.0 lb-kG 0.0 m-kG	233.3 in 5.93 m	3220 in-lb 37.4 m-kG

5. PARTS LIST

Qty	Part Number	Description
X	D900-619-011	BEARPAW INSTALLATION
4	D2182B060	RUBBER CUSHION
8	D2274	RADIUS BLOCK
2	D2421	BEARPAW
4	D2519	CLAMP
8	D2529	WASHER
8	AN4-15A	BOLT
8	AN960JD416	WASHER
8	MS21042L4	NUT (OR MS21042-4)
4	QS100M24S	CLAMP

• COPYRIGHT © 2001 BY DART AEROSPACE LTD •

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

Revision: A

Date: 01.02.21

Work Order ID 110350

110350

Page 1

December-17-13 9:23:58 AM

Item ID: D900-619-011

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Bearpaw

Start Date: 12/17/13 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 12/17/13 Req'd Qty: 1.00 *1*

Customer:

Reference:

Run Start *NR1*

Approvals: Process Plan: ML5 Date: 12-18 Tooling: _____ Date: _____

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr								
IIN-D900-619	A								

100 0.00

100

DC Memo
Document Control Photocopy bluefile & type labels per PPP D900-619-011
CHG003

ML5 14-01-20

2

110 Pick Kit 0.00

110

Packaging Memo
Packaging 0.00

2x 14-1-20 DAS
28
9-89

120 QC4- 100% Inspect kits for completeness 0.00

120

QC Memo
Quality Control 0.00